

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

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TO: Somerville Retirement Board

FROM: John W. Parsons, Esq., Executive Director

RE: Approval of Funding Schedule

DATE: December 3, 2019

This Commission is hereby furnishing you with approval of the revised funding schedule the Board recently adopted (copy enclosed). The schedule is effective in FY20 (since the amount under the prior schedule was maintained in FY20) and is acceptable under Chapter 32.

We outlined and reiterated a number of concerns regarding funding levels and the actuarial assumptions in our last five funding schedule memorandums (June 19, 2017, December 14, 2015, February 18, 2014, September 19, 2011 and August 12, 2009). We still have concerns regarding the actuarial assumptions as these assumptions are among the least conservative of any Chapter 32 system.

The Board reduced the investment return assumption from 8.0% to 7.75% as part of this actuarial valuation. There are 11 systems that are currently using an assumption of 7.75% and two systems use an assumption greater than 7.75%. We have generally recommended an assumption between 7.0% and 7.25% for our 2019 local system valuations, with the most common recommendation being 7.25%. For comparison, there are 34 systems currently using an assumption of 7.25% or lower. There are 64 systems using an assumption of 7.30% - 7.50%. Your 7.75% assumption is outside the high end of our reasonable range.

The 3.0% salary increase assumption is the lowest of any Chapter 32 system. PERAC's current standard assumption (ultimate rate after 10 years of service) ranges from 4.25% for Group 1 members to 4.75% for Group 4 members. Most systems have had gains during recent years based on the PERAC standard assumption as salary increases have been less than assumed, but the salary increase assumption is a long-term assumption. Even though there is a gain of \$1.9 million on salary in this valuation, we expect that over the long term this assumption will need to be increased (and/or the investment return assumption decreased) which will increase plan liabilities.

Our goal in designing funding schedules is to maintain, as much as possible, budgeted appropriation amounts in both good times and bad. The Chapter 32 systems that have consistently maintained the level of budgeted appropriations each year over the past 25 years generally have the most flexibility, the most conservative funding schedules, and the highest funded ratios.





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As part of this valuation, the Board voted to increase the FY21 appropriation by approximately \$800,000 over the level of the FY21 appropriation in the prior schedule developed as part of the January 1, 2017 actuarial valuation. However, despite that increase, we note that the FY21 appropriation is approximately equal to the FY21 appropriation adopted as part of the January 1, 2013 actuarial valuation. Further, this FY21 appropriation is still about \$4 million lower than that found in the January 1, 2007 actuarial valuation (before the market crash of 2008). The increase in appropriation level reflects a positive step and we hope this continues in future schedules.

We are available to discuss these issues further. If you have any questions, please contact PERAC's Actuary, John Boorack, at (617) 666-4446, extension 935.

JWP/ifb

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Appropriation Forecast

| Fiscal | | | Employer | Amortization | Employer | Employer | • |
|------------------|---------------|---------------|---------------|-----------------------------|---------------|--------------|-----------|
| Year | | Employee | Normal Cost | Payments | Total Cost | Total Cost | Funded |
| Ending | Payroll* | Contribution | with Interest | with Interest | with Interest | % of Payroll | Ratio %** |
| 2020 | \$75,529,664 | \$6,757,503 | \$2,558,128 | \$12,668,813 | \$15,226,941 | 20.2 | 62.7 |
| 2021 | \$78,550,851 | \$7,099,570 | \$2,585,957 | \$13,250,061 | \$15,836,018 | 20.2 | 65.8 |
| 2022 | \$80,907,376 | \$7,386,477 | \$2,586,805 | \$14,041,014 | \$16,627,819 | 20,6 | 68.7 |
| 2023 | \$83,334,597 | \$7,684,209 | \$2,585,377 | \$15,040,112 | \$17,625,489 | 21.2 | 71.3 |
| 2024 | \$85,834,635 | \$7,993,156 | \$2,581,534 | \$16,453,994 | \$19,035,528 | 22.2 | 73.8 |
| 2025 | \$88,409,674 | \$8,313,725 | \$2,575,135 | \$17,983,235 | \$20,558,370 | 23.3 | 76.4 |
| 2026 | \$91,061,965 | \$8,646,335 | \$2,566,028 | \$19,637,011 | \$22,203,039 | 24.4 | 78.9 |
| 2027 | \$93,793,824 | \$8,991,418 | \$2,554,056 | \$21,425,227 | \$23,979,283 | 25.6 | 81,4 |
| 2028 | \$96,607,638 | \$9,349,425 | \$2,539,057 | \$23,358,568 | \$25,897,625 | 26.8 | 84.0 |
| 2029 | \$99,505,867 | \$9,720,819 | \$2,520,860 | \$25,448,575 | \$27,969,435 | 28.1 | 86.7 |
| 2030 | \$102,491,043 | \$10,106,083 | \$2,499,286 | \$27,707,704 | \$30,206,990 | 29.5 | 89,4 |
| 2031 | \$105,565,775 | \$10,505,715 | \$2,474,148 | \$30,149,401 | \$32,623,549 | 30.9 | 92.2 |
| 2032 | \$108,732,748 | \$10,920,228. | \$2,445,252 | \$32,788,181 | \$35,233,433 | 32.4 | 95.0 |
| 2033 | \$111,994,730 | \$11,350,157 | \$2,412,397 | \$24,240,438 | \$26,652,835 | 23.8 | 98.0 |
| 2034 | \$115,354,572 | \$11,796,054 | \$2,375,369 | \$0 | \$2,375,369 | 2.1 | 100.0 |
| 2035 | \$118,815,209 | \$12,258,489 | \$2,333,948 | . \$0 | \$2,333,948 | 2.0 | 100.0 |
| 2036 | \$122,379,666 | \$12,738,055 | \$2,287,904 | \$0 | \$2,287,904 | 1.9 | 100.0 |
| 2037 | \$126,051,056 | \$13,235,361 | \$2,236,997 | \$0 | \$2,236,997 | 1.8 | 100.0 |
| 2038 | \$129,832,587 | \$13,632,422 | \$2,304,107 | -\$0 | \$2,304,107 | 1.8 | 100.0 |
| 2039 | \$133,727,565 | \$14,041,394 | \$2,373,231 | \$0 | \$2,373,231 | 1.8 | 100.0 |
| 2040 | \$137,739,392 | \$14,462,636 | \$2,444,428 | \$0 | \$2,444,428 | 1.8 | 100.0 |
| 2041 | \$141,871,574 | \$14,896,515 | \$2,517,760 | \$0 | \$2,517,760 | 1.8 | 100.0 |
| 2042 | \$146,127,721 | \$15,343,411 | \$2,593,293 | \$0 | \$2,593,293 | 1.8 | 100.0 |
| 2043 | \$150,511,553 | \$15,803,713 | \$2,671,092 | \$0 | \$2,671,092 | 1.8 | 100.0 |
| 2044 | \$155,026,899 | \$16,277,824 | \$2,751,225 | \$0 | \$2,751,225 | 1.8 | 100.0 |
| 2045 | \$159,677,706 | \$16,766,159 | \$2,833,761 | \$0 | \$2,833,761 | 1.8 | 100.0 |
| 2046 | \$164,468,037 | \$17,269,144 | \$2,918,774 | \$0 | \$2,918,774 | 1.8 | 100.0 |
| 2047 | \$169,402,078 | \$17,787,218 | \$3,006,338 | \$0 | \$3,006,338 | 1.8 | 100.0 |
| 2048 | \$174,484,141 | \$18,320,835 | \$3,096,528 | \$0 | \$3,096,528 | 1.8 | 100.0 |
| 2049 | \$179,718,665 | \$18,870,460 | \$3,189,423 | \$0 | \$3,189,423 | 1.8 | 100.0 |
| 2050 | \$185,110,225 | \$19,436,574 | \$3,285,106 | \$0 | \$3,285,106 | 1.8 | 100.0 |
| 2051 | \$190,663,532 | \$20,019,671 | \$3,383,659 | \$0 | \$3,383,659 | 1.8 | 100.0 |
| * Calendar basis | | | | ** Beginning of Fiscal Year | | | |